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Patent Abstracts of Japan

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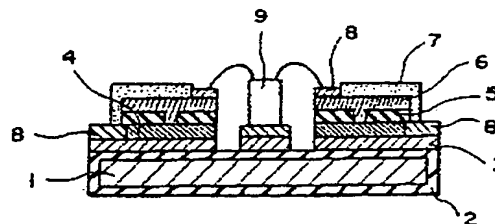
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APPLICANT : ALPS ELECTRIC CO LTD;

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TITLE : SUBSTRATE FOR LIGHT-EMITTING
DIODE ARRAY



ABSTRACT : PURPOSE: To obtain a substrate costing low and still having excellent heat dissipating properties, by utilizing an aluminum substrate whose surface is aluminized.

CONSTITUTION: An aluminum substrate 1, which carries a light-emitting diode array 9 thereon and on which a circuit for driving the light-emitting diode array 9 is patterned, has a surface aluminized. For example, an aluminized aluminum layer 2 may be formed in the aluminum substrate 1 by anodic oxidation. A conductor layer 3 is formed on this substrate 1 by a thin-film forming technique such as sputtering, vapor deposition or the like. A gold deposit layer 8 is provided thereon, and a light-emitting diode array 9 of GaAsP or the like is disposed and fixed on the layer 8 by the die bonding or by the use of a conducting adhesive or the like. A wiring pattern consisting of a gold deposit layer 8, a resistance layer 4, an insulation layer 5, a conductor layer 7 and a protection layer 7 is formed in the region on the conductor layer 3 not covered with the first mentioned gold deposit layer 8, and the wiring pattern is connected to the light-emitting diode array 9 by wire bonding.

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